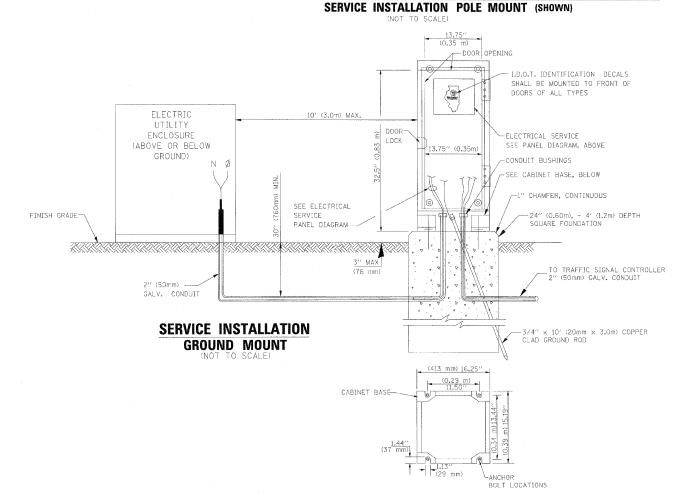


ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)



CABINET - BASE BOLT PATTERN

NOTES:

HANDHOLE COVER

DETAIL "A"

-HANDHOLE COVER

HANDLE

DETAIL "B"

- RECESSED COVER

-U.L. LISTED

GROUNDING CABLE (PAID FOR SEPARATELY)

-GROUND CABLES TO CONTROLLER DOUBLE HANDHOLE

TO POLE OR

POST AS REQ'D.

-SEE DETAIL "B"

CAST CORNER FRAME WEB -

ANTI-CORROSION COMPOUND
SHALL BE APPLIED ON ALL
BOLT/ CONNECTION ASSEMBLIES.
-STAINLESS STEEL NUT AND 2 STAINLESS
STEEL WASHERS

SEE DETAIL "A" -

REQUIRED, ALL

HANDHOLES

COMPRESSION CONNECTOR

UL LISTED GROUND -

UL LISTED GROUND COMPRESSION CONNECTOR

WITH STAINLESS STEEL N

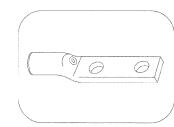
GROUNDING SYSTEM

(847) 705-4139.

3378 15VB-1-R-1 COOK 243 55
STA. TO STA.
FED. ROAD DIST. NO. | ILLINOIS | FED. AID | PROJECT
CONTRACT #62388

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR
TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN
RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED
IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED.
ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE
(HANDHOLE, POST, WAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE
3/4" DIA, x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD
SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS,
CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION
AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS
SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT
ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC,
ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT

- THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
- 3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- 4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



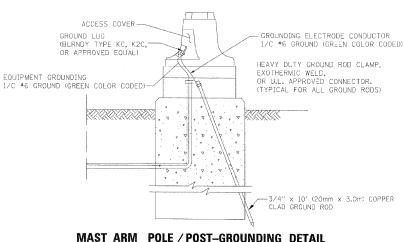
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMF (BURNDY TYPE GRC OR APPROVED EUAL)

NOTES:

• ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
• GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES
6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES
3' (4.0m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



(NOT TO SCALE)

REVISIONS NAME DATE	ILLINOIS DEPARTMENT OF TRANSPORTATION
	DISTRICT 1
	STANDARD TRAFFIC SIGNAL DESIGN DETAILS
	SCALE: VERT. NONE DESIGNED BY: RW HORIZ. NONE DESIGNED BY: CHECKED BY: DATE 06-17-2009 SHFET 3 OF 4

(2) 1/2" x 1 1/4" STAINLESS STEEL BOLT WITH SPLIT LOCK
WASHER AND NYLON INSERT LOCKOUT WELDED TO
FRAME AND TO COVER. (TYPICAL)

HEAVY DUTY COPPER COMPRESSION
GROUNDING TERMINAL. (TYPICAL)

(GREEN)

HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

- EXISTING HANDHOLE

FRAME AND COVER

(NOT TO SCALE)

TS05